

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An active pixel comprising:
a light sensing element formed in a semiconductor substrate;
a sense node in electrical communication with said light sensing element for outputting a signal produced by said light sensing element;
an amplification transistor controlled by said sense node, wherein said amplification transistor is formed so that when said amplification transistor is in an on state, most of the current passes through the body of the amplification transistor.
2. (original) The pixel of Claim 1 wherein said light sensing element is selected from the group of photodiode, pinned photodiode, partially pinned photodiode, or photogate.
3. (original) The pixel of Claim 1 further including a transfer transistor operative to transfer said signal from said light sensing element to said sense node.
4. (original) The pixel of Claim 1 wherein said amplification transistor outputs an amplified version of said signal to a column bitline.
5. (original) The pixel of Claim 1 further including a reset transistor operative to reset said sense node to a reference voltage.
6. (original) The pixel of Claim 1 wherein said buried transistor is replaced with a depletion mode transistor.
7. (Currently Amended) An active pixel for use in a CMOS image sensor comprising:
a light sensing element formed in a semiconductor substrate;
a sense node;

a transfer transistor operative to transfer a signal produced by said light sensing element to said sense node; and
an amplification transistor controlled by said sense node, wherein said amplification transistor is formed so that when said amplification transistor is in an on state, most of the current passes through the body of the amplification transistor.

8. (original) The pixel of Claim 7 wherein said light sensing element is selected from the group of photodiode, pinned photodiode, partially pinned photodiode, or photogate.
9. (original) The pixel of Claim 7 wherein said transfer transistor is implemented as a buried transistor.
10. (original) The pixel of Claim 7 wherein said amplification transistor outputs an amplified version of said signal to a column bitline.
11. (original) The pixel of Claim 7 further including a reset transistor operative to reset said sense node to a reference voltage.
12. (original) The pixel of Claim 7 wherein said body current transistor is a buried transistor or a depletion mode transistor formed in said semiconductor substrate.